ELSEVIER

Carbohydrate Research 291 (1996) C1–C2

CARBOHYDRATE RESEARCH

Author index

Albert, M.J. 165
Auzanneau, F.-I. 21

Büttner, U. 175

Colin-Morel, P. 115
Cossy, J. 189

Defaye, J. 85
De Waard, P. 141
Dinya, Z. 183

Forooghian, F. 21

Girond, S. 115
Györgydeák, Z. 183

Heathcock, C.H. 205
Heyraud, A. 115
Holme, T. 165
Huttunen, E. 155

Ibhi, S. 189

Jansson, P.-E. 109, 165
Jekő, J. 183

Kamerling, J.P. 63
Khitri, M. 197
Kiss, L. 43
Kloareg, B. 115
Knirel, Y.A. 217
Kumar, N.S. 109
Kuzuhara, H. 53

Landersjö, C. 209
Lay, L. 197
Leteux, C. 11
Linnerborg, M. 165

Mager, P.P. 1
Mahbubur Rahman, M. 165
M. Zdorovenko, G. 217

Nishi, N. 53
Norrild, J.C. 85

Ochs, S. 175

Panza, L. 197
Paramonov, N.A. 217
Pedersen, C. 85
Pinto, B.M. 21

Qadri, F. 165

Ratnayake, R.M.S.K. 109
Reinerink, E.J.M. 141
Reinhardt, R. 1
Richard, C. 115
Richter, M. 1
Riva, S. 197
Rundlöf, T. 127

Sakairi, N. 53
Scott, R.W. 205
Severin, T. 175
Shashkov, A.S. 217
Shiomi, T. 99
Somsák, L. 43
Staaf, M. 155
Szilágyi, L. 183

Tezuka, Y. 99
Tirendi, S. 197
Tokura, S. 53
Toukach, F.V. 217
Toupet, L. 11
Tsuchiya, Y. 99

Van Dam, J.E.G. 141
Van Dorst, J.A.L.M. 63
Van Hazendonk, J.M. 141
Van Heusden, C.J. 63
Veremeychenko, S.P. 217
Verlhac, P. 11
Veyrières, A. 11
Vliegenthart, J.F.G. 63
Voskamp, A.F. 63

Weintraub, A. 127, 209
Widmalm, G. 109, 127, 155, 165, 209

Yang, Z. 155

ELSEVIER

Carbohydrate Research 291 (1996) C3–C6

CARBOHYDRATE RESEARCH

Subject index

O-Acetylation
Structural analysis of acetylated hemicellulose polysaccharides from fibre flax (*Linum usitatissimum* L.) 141

N-Acetyllactosamine
Synthesis of Hex *p*-(1 → 4)-β-D-Glc*p*NAc-(1 → 2)-α-D-Man *p*-(1 → O(CH$_2$)$_7$CH$_3$ probes for exploration of the substrate specificity of glycosyltransferases: Part I, Hex = β-D-Gal, 4-deoxy-β-D-Gal, 4-*O*-methyl-β-D-Gal, 4-deoxy-4-fluoro-β-D-Gal, or β-D-Glc 63

Alginate lyase
HPLC analysis of saturated or unsaturated oligoguluronates and oligomannuronates. Application to the determination of the action pattern of *Haliotis tuberculata* alginate lyase 115

Aminoalditol
A new efficient and stereospecific conversion of aminodeoxyalditols into aminoalkyl-substituted tetrahydrofurans 85

Aminodeoxyalditol
A new efficient and stereospecific conversion of aminodeoxyalditols into aminoalkyl-substituted tetrahydrofurans 85

2-Amino-1,3-propanediol
Structure determination of the O-antigen polysaccharide from the enteroinvasive *Escherichia coli* (EIEC) O143 by component analysis and NMR spectroscopy 209

Anhydroalditols
A new efficient and stereospecific conversion of aminodeoxyalditols into aminoalkyl-substituted tetrahydrofurans 85

1,5-Anhydro-2-deoxy-2-*C*-methyl-D-*arabino*-hex-1-enitol, protected
An efficient synthesis of 3,4,6-tri-*O*-benzyl-2-*C*-methyl-D-glucal 205

Anomeric azides
Practical route to the anomeric methyl (5-acetamido-4,7,8,9-tetra-*O*-acetyl-3,5-dideoxy-D-*glycero*-D-*galacto*-non-2-ulopyranosyl)onate azides 183

O-Antigen
Structure determination of the O-antigen polysaccharide from the enteroinvasive *Escherichia coli* (EIEC) O143 by component analysis and NMR spectroscopy 209

O-Antigen, structure
Somatic antigens of pseudomonads: Structure of the O-specific polysaccharide of the reference strain for *Pseudomonas fluorescens* (IMV 4125, ATCC 13525, biovar A) 217

Bacterial polysaccharide
Somatic antigens of pseudomonads: Structure of the O-specific polysaccharide of the reference strain for *Pseudomonas fluorescens* (IMV 4125, ATCC 13525, biovar A) 217

Candida antarctica lipase
Regioselective acylation of disaccharides by enzymatic transesterification 197

Carbon–carbon bond formation in carbohydrates
Carbon–carbon bond formation in carbohydrates by a photoreductive cyclization reaction 189

Carboxymethylcellulose
^{13}C NMR determination of substituent distribution in carboxymethylcellulose by use of its peresterified derivatives 99

Chemical glycosylation
Efficient, convergent syntheses of oligosaccharide allyl glycosides corresponding to the *Streptococcus* Group A cell-wall polysaccharide 21

2-*C*-methyl-D-glucal
An efficient synthesis of 3,4,6-tri-*O*-benzyl-2-*C*-methyl-D-glucal 205

Cyclic benzylidene acetal
Interglycosidic acetals. Part 3. Synthesis and structure determination of cyclic monobenzyli-

dene acetals of cyclodextrin derivatives bridging between two contiguous D-glucopyranosyl residues 53
Cyclodextrin
Interglycosidic acetals. Part 3. Synthesis and structure determination of cyclic monobenzylidene acetals of cyclodextrin derivatives bridging between two contiguous D-glucopyranosyl residues 53
Cyclopropane opening
An efficient synthesis of 3,4,6-tri-*O*-benzyl-2-*C*-methyl-D-glucal 205
1,2-Cyclopropanes
An efficient synthesis of 3,4,6-tri-*O*-benzyl-2-*C*-methyl-D-glucal 205

Degradation
Selective cleavage of welan gum (S-130) by oxidative decarboxylation with lead tetraacetate 109
2-Deoxy-2-*C*-methyl-D-mannose
An efficient synthesis of 3,4,6-tri-*O*-benzyl-2-*C*-methyl-D-glucal 205
Disaccharides
Regioselective acylation of disaccharides by enzymatic transesterification 197

E. coli β-D-galactosidase
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43
Enteroinvasive
Structural studies of the enteroinvasive *Escherichia coli* (EIEC) O28 O-antigenic polysaccharide 127
Enzymatic acylation
Regioselective acylation of disaccharides by enzymatic transesterification 197
Enzyme inhibition
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43
Escherichia coli
Structural studies of the enteroinvasive *Escherichia coli* (EIEC) O28 O-antigenic polysaccharide 127
Structure determination of the O-antigen polysaccharide from the enteroinvasive *Escherichia coli* (EIEC) O143 by component analysis and NMR spectroscopy 209
Exopolysaccharide
Structural elucidation of an extracellular polysaccharide produced by *Lactobacillus helveticus* 155

Flax
Structural analysis of acetylated hemicellulose polysaccharides from fibre flax (*Linum usitatissimum* L.) 141
Friedel–Crafts reaction
Synthesis of 2-(α-D-glucopyranosyl)benzoic acid by an intramolecular Friedel–Crafts reaction 11

D-Galactal derivatives
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43
Glucomannan
Structural analysis of acetylated hemicellulose polysaccharides from fibre flax (*Linum usitatissimum* L.) 141
Glycoproteins
Synthesis of Hex *p*-(1 → 4)-β-D-Glc *p*NAc-(1 → 2)-α-D-Man *p*-(1 → O(CH$_2$)$_7$CH$_3$ probes for exploration of the substrate specificity of glycosyltransferases: Part I, Hex = β-D-Gal, 4-deoxy-β-D-Gal, 4-*O*-methyl-β-D-Gal, 4-deoxy-4-fluoro-β-D-Gal, or β-D-Glc 63
C-Glycoside
Synthesis of 2-(α-D-glucopyranosyl)benzoic acid by an intramolecular Friedel–Crafts reaction 11
C-Glycosides
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43
Glycosyltransferases
Synthesis of Hex *p*-(1 → 4)-β-D-Glc *p*NAc-(1 → 2)-α-D-Man *p*-(1 → O(CH$_2$)$_7$CH$_3$ probes for exploration of the substrate specificity of glycosyltransferases: Part I, Hex = β-D-Gal, 4-deoxy-β-D-Gal, 4-*O*-methyl-β-D-Gal, 4-deoxy-4-fluoro-β-D-Gal, or β-D-Glc 63

Haliotis tuberculata
HPLC analysis of saturated or unsaturated oligoguluronates and oligomannuronates. Application to the determination of the action pattern of *Haliotis tuberculata* alginate lyase 115
^{1}H and ^{13}C spectra
Practical route to the anomeric methyl (5-acetamido-4,7,8,9-tetra-*O*-acetyl-3,5-dideoxy-D-*glycero*-D-*galacto*-non-2-ulopyranosyl)onate azides 183
Hemicellulose
Structural analysis of acetylated hemicellulose polysaccharides from fibre flax (*Linum usitatissimum* L.) 141

HPLC
HPLC analysis of saturated or unsaturated oligoguluronates and oligomannuronates. Application to the determination of the action pattern of *Haliotis tuberculata* alginate lyase 115
Hydrogen fluoride
A new efficient and stereospecific conversion of aminodeoxyalditols into aminoalkyl-substituted tetrahydrofurans 85

Interglycosidic acetal
Interglycosidic acetals. Part 3. Synthesis and structure determination of cyclic monobenzylidene acetals of cyclodextrin derivatives bridging between two contiguous D-glucopyranosyl residues 53
Intramolecular reaction
Synthesis of 2-(α-D-glucopyranosyl)benzoic acid by an intramolecular Friedel–Crafts reaction 11

Lactobacillus helveticus
Structural elucidation of an extracellular polysaccharide produced by *Lactobacillus helveticus* 155
Lactose
Regioselective acylation of disaccharides by enzymatic transesterification 197
Lead tetraacetate
Selective cleavage of welan gum (S-130) by oxidative decarboxylation with lead tetraacetate 109
Lipopolysaccharide
Structural studies of the enteroinvasive *Escherichia coli* (EIEC) O28 O-antigenic polysaccharide 127
Structure determination of the O-antigen polysaccharide from the enteroinvasive *Escherichia coli* (EIEC) O143 by component analysis and NMR spectroscopy 209
Somatic antigens of pseudomonads: Structure of the O-specific polysaccharide of the reference strain for *Pseudomonas fluorescens* (IMV 4125, ATCC 13525, biovar A) 217

Maillard reaction
Formation of amino acids by reaction of glucose and xylose with primary amines 175
Mass spectra
Practical route to the anomeric methyl (5-acetamido-4,7,8,9-tetra-*O*-acetyl-3,5-dideoxy-D-*glycero*-D-*galacto*-non-2-ulopyranosyl)onate azides 183
Molecular mechanics calculations
Investigation of the conformational behaviour of permethylated cyclodextrins by molecular modelling 1
Molecular modelling
Investigation of the conformational behaviour of permethylated cyclodextrins by molecular modelling 1

Native α-, β- and γ-cyclodextrins
Investigation of the conformational behaviour of permethylated cyclodextrins by molecular modelling 1
Neuraminyl azides
Practical route to the anomeric methyl (5-acetamido-4,7,8,9-tetra-*O*-acetyl-3,5-dideoxy-D-*glycero*-D-*galacto*-non-2-ulopyranosyl)onate azides 183
NMR
Structural elucidation of an extracellular polysaccharide produced by *Lactobacillus helveticus* 155
NMR Spectroscopy
Somatic antigens of pseudomonads: Structure of the O-specific polysaccharide of the reference strain for *Pseudomonas fluorescens* (IMV 4125, ATCC 13525, biovar A) 217

Oligo-alginates
HPLC analysis of saturated or unsaturated oligoguluronates and oligomannuronates. Application to the determination of the action pattern of *Haliotis tuberculata* alginate lyase 115
Oligosaccharides
Synthesis of Hex *p*-(1 → 4)-β-D-Glc*p*NAc-(1 → 2)-α-D-Man*p*-(1 → O)$(CH_2)_7CH_3$ probes for exploration of the substrate specificity of glycosyltransferases: Part 1, Hex = β-D-Gal, 4-deoxy-β-D-Gal, 4-*O*-methyl-β-D-Gal, 4-deoxy-4-fluoro-β-D-Gal, or β-D-Glc 63
2-Oxabicyclo[4.3.0]nonan-7-ols
Carbon–carbon bond formation in carbohydrates by a photoreductive cyclization reaction 189

Permethylated α-, β- and γ-cyclodextrins
Investigation of the conformational behaviour of permethylated cyclodextrins by molecular modelling 1
Phosphodiester
Structural studies of the enteroinvasive *Escherichia coli* (EIEC) O28 O-antigenic polysaccharide 127
Photoreductive cyclization
Carbon–carbon bond formation in carbohydrates by a photoreductive cyclization reaction 189
Pseudomonas
Somatic antigens of pseudomonads: Structure of the O-specific polysaccharide of the refer-

ence strain for *Pseudomonas fluorescens* (IMV 4125, ATCC 13525, biovar A) 217

Pseudomonas cepacia lipase
Regioselective acylation of disaccharides by enzymatic transesterification 197

Quantum mechanics calculations
Investigation of the conformational behaviour of permethylated cyclodextrins by molecular modelling 1

Radical cyclization
Carbon–carbon bond formation in carbohydrates by a photoreductive cyclization reaction 189

Radical-mediated bromination
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43

Reductive elimination
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43

S-130
Selective cleavage of welan gum (S-130) by oxidative decarboxylation with lead tetraacetate 109

Selective protection
Interglycosidic acetals. Part 3. Synthesis and structure determination of cyclic monobenzylidene acetals of cyclodextrin derivatives bridging between two contiguous D-glucopyranosyl residues 53

Shigella boydii
Structure determination of the O-antigen polysaccharide from the enteroinvasive *Escherichia coli* (EIEC) O143 by component analysis and NMR spectroscopy 209

Silver tetrafluoroborate
Synthesis of 2-(α-D-glucopyranosyl)benzoic acid by an intramolecular Friedel–Crafts reaction 11

Streptococcus Group A cell-wall oligosaccharides
Efficient, convergent syntheses of oligosaccharide allyl glycosides corresponding to the *Streptococcus* Group A cell-wall polysaccharide 21

Substituent distribution in polysaccharide derivatives
^{13}C NMR determination of substituent distribution in carboxymethylcellulose by use of its peresterified derivatives 99

N-Substituted α-aminopropionic acids
Formation of amino acids by reaction of glucose and xylose with primary amines 175

N-Substituted 4,5,6-trihydroxy-α-aminohexanoic acids
Formation of amino acids by reaction of glucose and xylose with primary amines 175

Substitution mode by ^{13}C NMR
^{13}C NMR determination of substituent distribution in carboxymethylcellulose by use of its peresterified derivatives 99

Substrate analogues
Synthesis of Hex *p*-(1 → 4)-β-D-Glc *p*NAc-(1 → 2)-α-D-Man *p*-(1 → O)$(CH_2)_7CH_3$ probes for exploration of the substrate specificity of glycosyltransferases: Part I, Hex = β-D-Gal, 4-deoxy-β-D-Gal, 4-*O*-methyl-β-D-Gal, 4-deoxy-4-fluoro-β-D-Gal, or β-D-Glc 63

Sugars
Formation of amino acids by reaction of glucose and xylose with primary amines 175

Teichoic acid type
Structural studies of the enteroinvasive *Escherichia coli* (EIEC) O28 O-antigenic polysaccharide 127

Tetrahydrofurans
A new efficient and stereospecific conversion of aminodeoxyalditols into aminoalkyl-substituted tetrahydrofurans 85

Transacetalation
Interglycosidic acetals. Part 3. Synthesis and structure determination of cyclic monobenzylidene acetals of cyclodextrin derivatives bridging between two contiguous D-glucopyranosyl residues 53

Welan gum
Selective cleavage of welan gum (S-130) by oxidative decarboxylation with lead tetraacetate 109

Xylan
Structural analysis of acetylated hemicellulose polysaccharides from fibre flax (*Linum usitatissimum* L.) 141

Zinc/*N*-methylimidazole reagent
Evaluation of *C*-(β-D-galactosyl) and *C*-(2-deoxy-D-*lyxo*-hex-1-enopyranosyl) (D-galactal type) derivatives as inhibitors of β-D-galactosidase from *Escherichia coli* 43